Amendments to the Specification

Please replace the paragraph at page 2, lines 24-28 through page 3, lines 1-7 with the following amended paragraph:

A method and apparatus is provided for aggregating bandwidth over a communications network and providing redundancy in case of failure of a link in a switch, the switch coupled between a network file server and the communications network. The network file server includes a plurality of communications ports coupled to a switch. A trunk configuration routine in the network file server creates a virtual device for the plurality of communications ports and sets a trunk network address to a first network address assigned to a first communications port. The trunk configuration routine sets network addresses for the plurality of communications ports and a virtual network address assigned to the virtual network ~~address~~ device to the trunk network address. The network file server also includes an owner routine. The owner routine selects a virtual device associated with the trunk network device for a data packet for the trunk network address received by any of the communications ports in the trunk.

Please replace the paragraph at page 7, lines 16-22 with the following amended paragraph:

In the embodiment shown, trunk 124-0 includes four physical links 122-0, . . . , 122-3, and trunk 124-1 includes four physical links 122-4, . . . ,122-7. However, the invention is not limited to four physical links per trunk. Each of the physical links 122-0, . . . ,123-3 in trunk 124-0 and physical links 122-4, . . . ,122-7 in trunk 124-1 are coupled to an independent physical network device port ~~131-1~~ 136-0, . . . ,136-9 in the network interface 120. Each network device port 136-1, . . . ,136-9 can be assigned a different Media Access Control ("MAC") address and Internet Protocol ("IP") address.

Please replace the paragraph at page 9, lines 20-26 through page 10, lines 1-7 with the following amended paragraph:

A failsafe network device 146 that includes trunks 124-0 and 124-1 can be configured. Trunk 124-0 includes physical links 122-0, . . . ,122-3 coupling the network interface 120 to switch 104. Trunk 124-1 includes physical links 122-4, . . . ,122-7 coupling the network interface 120 to switch 130. Failsafe network device 146 provides redundancy in the case of failure of one of the trunks 124-0, 124-1 by providing a path to the MAC destination address assigned to failsafe network device 142 through the other trunk 124-0, 124-1. The same MAC address is assigned to trunks 124-0, 124-1 and failsafe network device 146. Thus, a data packet received by switch 104 from clients 126-1, . . . ,126-N is forwarded to the network interface 120 on trunk 124-0. A data packet received by switch 130 for the MAC address assigned to failsafe network device 146 is forwarded by switch 130 on trunk 124-1. Upon a failure of trunk 124-0, clients 126-1, . . . ,26-N can access the MAC address assigned to failsafe network device ~~142~~ 146 through trunk 124-1. Thus, multiple levels of redundancy can be provided by creating virtual devices for trunks and failsafe network devices.

Please replace the paragraph at page 10, lines 8-17 with the following amended paragraph:

Fig. 2 is a block diagram of device structures allocated in the NICdevice driver ~~140~~ 142 in memory 108 for each network device port shown in Fig. 1. A NICdevice structure 200 is allocated for each network device port 136-0, . . . ,136-9 in the network interface 120 in the data mover 100. A NICdevice structure 200 is also allocated for each trunk 124-0, 124-1 and failsafe network device 146. The NICdevice structure 200 includes an owner field 202, a port field 204 and a driver field 206. The port field 204 stores a unique number assigned to the network device port 136-0, . . . ,136-9. The driver field 206 stores a pointer to the NICdevice driver 142 associated with the network device port 136-0, . . . ,136-9. The NICdevice driver 142 manages NICs 134-0, . . . , 134-4 of the same vendor type installed in the data mover 100.

Please replace the paragraph at page 11, lines 23-25 with the following amended paragraph:

Fig. 3 is a flowchart illustrating a method for configuring a trunk 124-0, 124-1 including physical links 122-0, . . . ,122-7 coupled between the data mover 100 and any of the network switches 104,130 shown in Fig. 1.

Please replace the paragraph at page 11, lines 26-29 through page 12, lines 1-16 with the following amended paragraph:

The trunk configuration routine 144 in memory 108 in the data mover 100 is called to create a trunk 124-0, 124-1 upon receiving a user command to create a trunk 124-0, 124-1. The configuration routine 144 is called to create a trunk 124-0, 124-1 by entering the following command:

server_sysconfig *movername* -virtual -n *device* -create *class* -options *option_list*

where: movername = data mover node name.
device = user-defined device name of trunk (for example, trk0).
class = class of the interface being created. (trunk).
option_list = list of physical NICdevice ports 136-0...136-9 being aggregated in the trunk 124-0, 124-1.

The trunk configuration routine 144 is called to create trunk ~~124-2~~ 124-0, 124-1 to include physical links 122-0, . . . ,122-7 coupled to both switch 104 and switch 130 by entering the following command:

server_sysconfig *movername* -virtual -n *device* -create *class* -options *option_list*

where
device = user-defined device name of trunk (trk3).
class = class of the interface being created. (trunk).

option list = list of trunks being aggregated in this trunk. (For example, trk0 for trunk 124-0 and trk1 for trunk 124-1)

Please replace the paragraph at page 12, lines 17-21 with the following amended paragraph:

The server_sysconfig command is parsed using a command line interface utility program. Command link interface utility programs are well-known to those skilled in the art and beyond the scope of the present invention. After parsing the command, the utility program calls the trunk configuration routine 144 to create the trunk ~~214-0~~ 124-0, 124-1.

Please replace the paragraph at page 17, lines 17-24 with the following amended paragraph:

At step 602, the owner routine 208 examines the state of owner 202 in the NICdevice structure 200-0, . . . ,200-9 allocated to the network port device coupled to the physical link 126-0, . . . ,126-1 on which the data packet was received. If owner 200 is '0', the physical link 126-0, . . . ,126-9 on which the data packet was received is not a member of trunk 124-0, 124-1 and processing continues with step ~~608~~ 606. If the owner 202 stores a pointer to a another NICdevice structure 200, the physical link 126-0, . . . ,126-9 on which the data packet was received is a member of trunk 124-0, 124-1 and processing continues with step 604.

Please replace the paragraph at page 18, lines 8-10 with the following amended paragraph:

At step 608, the NICdevice driver 142 checks if there is more data to process. If so, processing continues with step ~~608~~ 606. If not, processing continues with step 600 to wait for the next received data packet.